#### STATEMENT OF BASIS (AI No. 9789) PER20060001

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0091961 to discharge to waters of the State of Louisiana.

THE APPLICANT IS:

Gulf Island Fabrication, Inc.

East Yard, West Yard, and Southport

Post Office Box 310 Houma, Louisiana 70361

**ISSUING OFFICE:** 

Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

Post Office Box 4313

Baton Rouge, Louisiana 70821-4313

PREPARED BY:

Lisa Kemp

DATE PREPARED:

October 18, 2006

#### 1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of an administratively extended Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. NPDES permit -

NPDES permit effective date: N/A

NPDES permit expiration date: N/A

EPA has not retained enforcement authority.

C. LPDES permits -

Gulf Island Fabrication (LA0091961)
LPDES permit effective date: June 1, 2001
LPDES permit expiration date: May 31, 2006

This permit was modified effective March 1, 2004

Gulf Island Fabrication (LAG531377)\*

LPDES permit effective date: February 24, 2003 LPDES permit expiration date: November 30, 2007 This permit was modified effective March 24, 2003\*

\*This facility was issued coverage under the LPDES Class I Sanitary Discharge General Permit (LAG531271) on February 24, 2003 for a new sanitary discharge at the East Yard Fabrication Shop. LPDES permit LAG531271 was modified on March 24, 2003 to correct the LPDES permit number. The correct LPDES permit number is LAG531377. This sanitary discharge will be included in the renewal permit and coverage under LAG531377 will be terminated upon reissuance of LPDES permit LA0091961.

D. Date Application Received: January 31, 2006; Additional information received via email on August 4, 2006; via telephone conversation on August 11, 2006; via email on August 21, 2006; amendments to the application received on August 28, 2006; additional information received via email on September 19, 2005 and via telephone conversation on October 12, 2006

#### 2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - fabricator of offshore oil and gas structures

Gulf Island Fabrication (GIF) is comprised of three yards, East Yard (formerly known as the Main Yard), West Yard, and Southport, located on the Houma Navigation Canal. GIF is an existing facility which fabricates offshore structures utilized by the oil and gas industry. The facility discharges treated sanitary wastewater, hydrostatic test wastewater, utility washwater, and industrial stormwater runoff.

There are two vehicle/equipment wash areas located in the East Yard. A washrack is located near the mechanic shop. Washrack water from the mechanic shop goes to a sump, then to an oil/water separator. The oil/water separator is pumped out and disposed of offsite by a contractor. There is another carwash area in the East Yard where vehicles may be washed to remove dirt and dust. Small amounts of biodegradable soap are occasionally used in the carwash area.

Equipment washing can occur anywhere at the facility. Equipment may be pressure washed, and occasionally, a project will be pressure washed to remove dust and dirt. Buildings are occasionally pressure washed (no soaps or detergents) to remove dust and dirt.

Equipment cooling water and plasma cutter water are no longer discharged. These wastewaters are now collected by a contractor and disposed of offsite.

Hydrostatic testing is performed at each of the three yards. The estimated flow of hydrostatic test wastewater is 1500 gallons per day per yard. CRW132 and CRW201 are used as additives in the hydrostatic test water approximately 30% of the time. The mix ratio is 1 gallon of inhibitor to 4200 gallons of water. Test water containing additive is batched and tested before discharge. If the test results show no excursions, the water is discharged to the ground. Water that does not evaporate or soak into the ground could discharge to the Houma Navigational Canal through the stormwater outfalls. If there are excursions, the test water is taken offsite for disposal.

After review of the MSDS and toxicity data, CRW132 and CRW201 are approved for use in the hydrostatic test water as described above. There shall be no discharge of toxic materials in quantities such as to cause acute toxicity to aquatic organisms in the receiving stream. Any changes in the concentrations of the additives, addition of new additives, or in the estimated flow of hydrostatic water containing the additives will need prior approval from this Office.

Hydroblasting is done on site by a third party contractor. No hydroblast waters are discharged.

Sandblasting is performed both inside and outside at all three yards. Almost all structures sandblasted are new structures; however, refurbishing of old structures is sometimes performed on site. Most sandblasting involves the sandblasting of raw steel on new structures. Paint may be sandblasted from old structures. All paint is tested for lead before the job begins.

#### B. FEE RATE

- 1. Fee Rating Facility Type: minor
- 2. Complexity Type:

]]\*

3. Wastewater Type:

III - discharges consist of sanitary, washwater, hydrostatic test wastewater, and industrial stormwater runoff

4. SIC codes:

3731, 3441, and 1389

\* The Complexity Type was BPJ'd from IV to II to match other similar fabricating facilities.

C. LOCATION -

583 Thompson Road, in Houma, Terrebonne Parish

Latitude 29° 32' 37", Longitude 90° 42' 35"

#### 3. OUTFALL INFORMATION

#### East Yard

#### Outfall 01A

Discharge Type:

stormwater runoff combined with utility washwater from pressure washing

projects and equipment washing, exterior vehicle washwater, previously monitored hydrostatic test water, and previously monitored treated sanitary

wastewater from the East Yard

Treatment:

sediment basin

Location:

at the point of discharge from the treatment facility located on the south side

of the East Yard

Latitude 29° 32' 33", Longitude 90° 41' 51"

Flow:

Intermittent (estimated flow of previously monitored treated sanitary

wastewater is 16,500 gpd)

Discharge Route:

an unnamed ditch to the Houma Navigation Canal

#### Outfall 01B

Discharge Type:

stormwater runoff combined with utility washwater from pressure washing

projects and equipment washing, exterior vehicle washwater, previously monitored hydrostatic test water, and previously monitored treated sanitary

wastewater from the East Yard

Treatment:

sediment basin

Location:

at the point of discharge from the treatment facility located on the south side

of the East Yard

Latitude 29° 32' 16", Longitude 90° 42' 15"

Flow:

Intermittent (back-up pump)

Discharge Route:

an unnamed ditch to the Houma Navigation Canal

Note: Outfall 01B is a backup pump for Outfall 01A.

#### Outfall 101

Discharge Type:

treated sanitary wastewater from the East Yard Old Vessel Shop

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the Old Vessel

Shop in the East Yard

Latitude 29° 32' 26", Longitude 90° 41' 44"

Flow:

500 gpd

Discharge Route:

through Outfall 001 to the Houma Navigation Canal

#### Outfall 201

Discharge Type:

treated sanitary wastewater from the East Yard Pipe Mill

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

Pipe Mill

Latitude 29° 32' 34", Longitude 90° 41' 51"

Flow:

1000 gpd

Discharge Route:

through Outfall 001 to the Houma Navigation Canal

#### Outfail 301

Discharge Type:

treated sanitary wastewater from the East Yard Shot Blast

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

Shot Blast

Latitude 29° 32' 22", Longitude 90° 41' 57"

Flow:

500 gpd

Discharge Route:

through Outfall 001 to the Houma Navigation Canal

### Outfall 401

Discharge Type:

treated sanitary wastewater from the South Restroom at the East Yard

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the South

Restroom at the East Yard

Latitude 29° 32' 17", Longitude 90° 42' 06"

Flow:

4500 gpd

Discharge Route:

through Outfall 001 to the Houma Navigation Canal

#### Outfall 501

Discharge Type:

treated sanitary wastewater from the East Yard Main Plant (Big Yellow)

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

Main Plant

Latitude 29° 32' 31", Longitude 90° 41' 44"

Flow:

7500 gpd

Discharge Route:

through Outfall 001 to the Houma Navigation Canal

#### Outfall 601

This outfall will be deleted because the sewage treatment facility at the ball park is no longer in service.

Outfall 701

(Formerly Outfall 001 from LAG531377)

Discharge Type:

treated sanitary wastewater from the East Yard New Fabrication Shop

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

New Fabrication Shop

Latitude 29° 32' 14", Longitude 90° 42' 04"

Flow:

2500 gpd

Discharge Route:

through Outfall 001 to the Houma Navigation Canal

Outfall 002

Discharge Type:

stormwater runoff, exterior vehicle washwater, utility washwater from pressure washing projects and equipment washing, previously monitored hydrostatic test water, and previously monitored treated sanitary wastewater

from the East Yard

Treatment:

sediment basin

Location:

at the point of discharge from the treatment facility located on the northwest

corner of the East Yard

Latitude 29° 32' 31", Longitude 90° 42' 13"

Flow:

Intermittent (estimated flow of previously monitored treated sanitary

wastewater is 6,000 gpd)

Discharge Route:

unnamed ditch to the Houma Navigation Canal

Outfall 102

Discharge Type:

treated sanitary wastewater from the East Yard Safety Building

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

Safety Building

Latitude 29° 32' 32", Longitude 90° 41' 52"

Flow:

1000 gpd

Discharge Route:

through Outfall 002 to the Houma Navigation Canal

Outfall 202

Discharge Type:

treated sanitary wastewater from the East Yard Quality Control area

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

Quality Control area

Latitude 29° 32' 30", Longitude 90° 41' 59"

Flow:

500 gpc

Discharge Route:

through Outfall 002 to the Houma Navigation Canal

#### Outfall 302

Discharge Type:

treated sanitary wastewater from the East Yard North Restroom

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility at the East Yard

North Restroom

Latitude 29° 32′ 30″, Longitude 90° 42′ 10″

Flow:

4500 gpd

Discharge Route:

through Outfall 002 to the Houma Navigation Canal

#### Outfall 602

Discharge Type:

hydrostatic test water from the East Yard (this outfall consists of all East

Yard hydrostatic test outfalls in the current permit)

Treatment:

none

Location:

at the point of discharge from the equipment or pipe being tested

or prior to discharge from the holding tanks

Flow:

Intermittent (1500 gpd – Estimated Average)

Discharge Route:

Outfall 01A, 01B, or 002 to the Houma Navigation Canal

#### Outfall 003

Discharge Type:

stormwater runoff, utility washwater from pressure washing projects and equipment washing, exterior vehicle washwater, previously monitored hydrostatic test water, and previously monitored treated sanitary wastewater

from the West Yard

Treatment:

none

Location:

at the point of discharge from the west side of the WestYard

Latitude 29° 32' 56", Longitude 90° 43' 07"

Flow:

Intermittent (estimated flow of previously monitored treated sanitary

wastewater is 9,500 gpd)

Discharge Route:

unnamed ditch to the Houma Navigation Canal

#### Outfall 103

Discharge Type:

treated sanitary wastewater from the West Yard Warehouse and South

Restroom

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility

Latitude 29° 32' 38", Longitude 90° 42' 31"

Flow:

4000 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

#### Outfall 203

This outfall will be deleted because the unit has been tied into the sewage treatment facility located at Outfall 103.

#### Outfall 303

Discharge Type:

treated sanitary wastewater from the West Yard Medic's Trailer

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility located at the

Medic's Trailer in the West Yard

Latitude 29° 32' 35", Longitude 90° 42' 35"

Flow:

500 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

#### Outfall 403

Discharge Type:

treated sanitary wastewater from the West Yard Inspector's Trailer

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility located at the

Inspector's Trailer in the West Yard

Latitude 29° 32' 37", Longitude 90° 42' 35"

Flow:

500 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

# Outfall 503

Discharge Type:

treated sanitary wastewater from the West Yard Brace Rack

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility located at the

West Yard Brace Rack

Latitude 29° 32' 42", Longitude 90° 42' 39"

Flow:

500 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

# Outfall 603

Discharge Type:

treated sanitary wastewater from the West Yard Fabrication Shop

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility located at the

West Yard Fabrication Shop

Latitude 29° 32' 54", Longitude 90° 42' 47"

Flow:

1500 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

### Outfall 703

Discharge Type:

treated sanitary wastewater from the West Yard Pipe Mill

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility located at the

West Yard Pipe Mill

Latitude 29° 32' 56", Longitude 90° 42' 50"

Flow:

1000 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

#### Outfall 803

Discharge Type:

treated sanitary wastewater from the West Yard North Restroom

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility

Latitude 29° 32' 49", Longitude 90° 42' 33"

Flow:

1500 gpd

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

#### Outfall 903

Discharge Type:

hydrostatic test water from the West Yard (this outfall consists of all

WestYard hydrostatic test outfalls in the current permit)

Treatment:

none

Location:

at the point of discharge from the equipment or pipe being tested

or prior to discharge from the holding tanks

Intermittent (1500 gpd – Estimated Average)

Discharge Route:

through Outfall 003 to the Houma Navigation Canal

#### Outfall 004

Discharge Type:

treated sanitary wastewater from the East Yard Inspector's Trailers

Treatment:

mechanical treatment plant Location:

at the point of discharge from the sewage treatment facility

Latitude 29° 32' 33", Longitude 90° 41' 51"

Flow:

Discharge Route:

unnamed ditch to Munson Slip; thence to the Houma Navigational Canal

#### Outfall 005

Discharge Type:

treated sanitary wastewater from Dolphin Steel Sales next to the East Yard

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility

Latitude 29° 32' 36", Longitude 90° 41' 41"

Flow:

Discharge Route:

unnamed ditch to Munson Slip; thence to the Houma Navigational Canal

#### Outfall 006

Discharge Type:

stormwater runoff, utility washwater from pressure washing projects, previously monitored hydrostatic test water, and previously monitored

treated sanitary wastewater from the SouthportYard

Treatment:

none

Location:

at the point of discharge from the southeast corner of the Southport Yard

Latitude 29° 32' 34", Longitude 90° 42' 05"

Flow:

Intermittent (estimated flow of previously monitored treated sanitary

wastewater is 5,000 gpd)

Discharge Route:

unnamed ditch to Munson Slip; thence to the Houma Navigational Canal

#### Outfall 106

Discharge Type:

treated sanitary wastewater from Southport Yard Main Office

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility

Latitude 29° 32' 33", Longitude 90° 42' 12"

Flow:

2000 gpd

Discharge Route:

through Outfall 006 to an unnamed ditch; thence to Munson Slip; thence to

the Houma Navigational Canal

#### Outfall 007

Discharge Type:

stormwater runoff, utility washwater from pressure washing projects, and

previously monitored hydrostatic test water from the SouthportYard

Treatment:

none

Location:

at the point of discharge from the middle of the west property line of the

Southport Yard

Latitude 29° 32' 37", Longitude 90° 42' 13"

Flow:

Intermittent

Discharge Route:

unnamed ditch to the Houma Navigational Canal

#### Outfall 008

(Internal to 006)

Discharge Type:

treated sanitary wastewater from the central area ( Medic Building) of the

Southport Yard

Treatment:

mechanical treatment plant

Location:

at the point of discharge from the sewage treatment facility in the central

area (Medic Building) of the Southport Yard Latitude 29° 32' 35", Longitude 90° 42' 11"

Flow:

3000 gpd

Discharge Route:

through Outfall 006 to an unnamed ditch; thence to Munson Slip; thence to

the Houma Navigational Canal

#### Outfall 009

This outfall will be deleted because the sewage treatment facility was never installed.

#### Outfall 010

This outfall will be deleted because the ditch is no longer there.

### Outfall 011

Discharge Type:

hydrostatic test water from the Southport Yard (this outfall consists of all

SouthportYard hydrostatic test outfalls in the current permit)

Treatment:

none

Location:

at the point of discharge from the equipment or pipe being tested

or prior to discharge from the holding tanks

Flow:

Intermittent (1500 gpd – Estimated Average)

Discharge Route:

through Outfall 006 or 007 to local drainage; thence to the Houma

Navigation Canal

#### 4. RECEIVING WATERS

STREAM - the Houma Navigation Canal - Houma to Bayou Pelton

1. TSS (15%), mg/L: 16.88

2. Average Hardness, mg/L CaCO<sub>3</sub>: 218.67

3. Critical Flow, cfs: 1407

4. Mixing Zone Fraction: 0.333

5. Tidal Flow, cfs: 4220

Information based on the following: LAC 33: IX Chapter 11; Recommendations from the LDEQ Engineering Section. Hardness and 15% TSS were taken from an ambient sampling site in the Houma Navigational Canal at Gulf Island Dock, site number 942.

BASIN AND SEGMENT - Terrebonne Basin, Segment 120509

DESIGNATED USES - a. primary contact recreation

b. secondary contact recreation

c. propagation of fish and wildlife

d. drinking water supply

#### 5. TMDL STATUS

Subsegment 120509, Houma Navigation Canal – Houma to Bayou Pelton, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

#### 6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale, Page 20

Changes from the previous permit:

- A. The previous permit listed the discharges to the Houma Navigation Canal from this facility as located in Subsegment 120508, Houma Navigation Canal Bayou Pelton to the boundary between segments 1205 and 1207 (Estuarine), of the Terrebonne Basin. Oyster propagation is listed as a designated use of Subsegment 120508. Therefore, fecal coliform limits for treated sanitary wastewater discharges to Subsegment 120508 were set at 43 colonies/100 ml, weekly average. According to the current subsegment map, the discharges from this facility are made to the Houma Navigation Canal in Subsegment 120509, Houma Navigation Canal Houma to Bayou Pelton. Oyster Propagation is not listed as a designated use of Subsegment 120509. Therefore, fecal coliform limits for the treated sanitary wastewater discharges are now set at 400 col/100 ml, weekly average.
- B. In the previous permit and in the initial renewal application, Outfalls 004, 005, 006, and 008 were listed as discharging to Bayou Grand Caillou. Upon further review, the facility determined that none of the outfalls discharge into Bayou Grand Caillou. All of the outfalls were reviewed by the facility and amended, certified application pages were submitted for all outfalls.

- C. Equipment cooling water and plasma cutter water are no longer discharged. Both are collected and taken offsite by a contractor for proper disposal.
- D. Outfall 601, treated sanitary wastewater, has been deleted because the sewage treatment facility at the ball park is no longer in service.
- E. Outfall 701, treated sanitary wastewater, has been added. This outfall was previously permitted as Outfall 001 under LAG531377. Coverage under LAG531377 will be terminated upon reissuance of LPDES permit LA0091961.
- F. Outfall 203, treated sanitary wastewater, has been deleted because the unit has been tied into the sewage treatment facility located at Outfall 103.
- G. Outfall 009, treated sanitary wastewater, has been deleted because the sewage treatment facility was never installed.
- H. Outfall 010, stormwater runoff, utility wastewater, and previously monitored hydrostatic test water, has been deleted because the ditch no longer exists.
- I. Outfalls 602 (East Yard), 903 (West Yard), and 011 (Southport Yard) have been added at the request of the permittee to consolidate all hydrostatic test wastewaters from each yard into one outfall per yard.
- J. Hydrostatic Test Wastewater The monitoring frequency for Hydrostatic Test Wastewater has been changed from once per discharge to once per quarter for new equipment and once per discharge for equipment which has previously been in service (see Rationale, Page 24).
- K. The monitoring frequency for Outfalls 301, 401, 302, 103, 303, 803, 004, and 008 has been increased from once per six months to once per three months due to a history of noncompliance with permit limits at these outfalls.
- L. The monitoring frequency for Outfall 501has been increased from once per three months to once per month due to a history of noncompliance with permit limits at this outfall.

#### 7. COMPLIANCE HISTORY/COMMENTS

- A. Water Compliance History
  - WQMD Compliance Order MM-CN-03-0084 was issued on March 28, 2004.
     Amended Compliance Order MM-CN-03-0084A was issued on June 14, 2005.
     Amended Compliance Order MM-CN-03-0084B was issued on February 24, 2006. The compliance order explained the following:
    - a. DMR reviews and an inspection conducted by the Department June 22, 2005, revealed numerous violations from January, 2001 through March, 2005 for LPDES permit LA0091961
    - b. Noncompliance with Air Permit No. 2880-00059-V0
    - c. Using coatings and solvents that have nonpermitted toxic air pollutant constituents

Compliance Order WE-C-99-0190 was issued on October 25, 2000 for effluent violations, failing to have an adequate Spill Prevention and Control (SPC) Plan, having an unpermitted outfall, and operational and maintenance deficiencies.

- 2. Inspections A compliance inspection conducted at this facility June 22, 2005, revealed the following:
  - a. No areas of concern were observed with the operation of the treatment units.
  - b. DMR review revealed several violations.
- B. DMR Review/Excursions DMRs were reviewed for January, 2003 to June, 2006. Notices of violations sent to LDEQ from the permittee and violations listed in Amended Compliance Order MM-CN-03-0084B were also reviewed. The violations were as follows:

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	Reported Value	Permit Limits
LA0091961				
Jan June 2003	BOD TSS Fecal Coliform	101 101 101	87 mg/L 64 mg/L TNTC*	45 mg/L 45 mg/L 43 col/100 ml
July – Dec. 2003	TSS	101	65 mg/L	45 mg/L
Jan. – June 2003	BOD Fecal Coliform	201 201	60 mg/L 90 col/100 ml	45 mg/L 43 col/ 100 ml
July Dec. 2003	Fecal Coliform	201	720 col/100 ml	43 col/100 mi
July – Dec. 2003	TSS	301	56 mg/L	45 mg/L
July – Dec. 2003	Fecal Coliform	301	160 col/100 ml	43 mg/L 43 col/100 ml
Jan. – June 2004	Fecal Coliform	301	80 col/100 ml	43 col/100 ml
July – Dec. 2004	Fecal Coliform	301	90 col/mi	43 col/ml
	TSS	301	76 mg/L	45 mg/L
July - Dec. 2005	BOD	301	60 mg/L	45 mg/L
<b>,</b>	Fecal Coliform	301	46,000 col/100 ml	43 col/100 ml
	TO O	404		45 5
Jan. – June 2003	TSS	401	164 mg/L	45 mg/L
July – Dec. 2003	TSS	401	136 mg/L	45 mg/L
	TSS Fecal Coliform	401	95 mg/L	45 mg/L
I.d., D., 2004		401	6,300 col/100 ml	43 col/100 ml
July – Dec. 2004	Fecal Coliform	401	180 col/ml	43 col/ml
Jan. – March 2003	TSS	501	· 66 mg/L	45 mg/L
April - June 2003	Fecal Coliform	501	2,400 col/100 ml	43 col/100ml
Jan. – March 2005	TSS	501	76 mg/L	45 mg/L
OctDec. 2005	Fecal Coliform	501	8,000 col/100 ml	43 col/100 ml
Jan. – March 2006	TSS	501	84 mg/L	45 mg/L

# DMR Review/Excursions - continued

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	Reported Value	Permit Limits
July-Sept. 2004	COD	002	140 mg/L	125 mg/L
July – Dec. 2003	Fecal Coliform	102	920 col/100 ml	43 col/100 ml
Jan. – June 2004	TSS	102	138 mg/L	45 mg/L
July- Dec. 2004	TSS	102	110 mg/L	45 mg/L
July – Dec. 2003	TSS	202	87 mg/L	45 mg/L
Jan. – June 2003	BOD	302	102 mg/L	45 mg/L
	TSS	302	174 mg/L	45 mg/L
	Fecal Coliform	302	197,000 col/100ml	43 col/100ml
July – Dec. 2003 Jan. – June 2004 July – Dec. 2004	Fecal Coliform BOD TSS Fecal Coliform	302 302 302 302	7150 col/100 ml 50 mg/L 104 mg/L 530 col/ml	43 col/100 ml 45 mg/L 45 mg/L 43 col/ml
•				
July – Dec. 2003	TSS	103	116 mg/L	45 mg/L
	TSS	103	46 mg/L	45 mg/L
	Fecal Coliform	103	1130 col/100 ml	43 col/100 mi
Jan. – June 2004	BOD	103	59 mg/L	45 mg/L
	TSS	103	55 mg/L	45 mg/L
	Fecal Coliform	103	8,300 col/100 ml	43 col/100 ml
Jan. – June 2003	Fecal Coliform	203	1160 col/100 ml	43 col/100 ml
July – Dec. 2003	TSS	203	58 mg/L	45 mg/L
Jan. – June 2004	TSS	203	102 mg/L	45 mg/L
July – Dec 2004	TSS	203	195 mg/L	45 mg/L
Jan. – June 2004	TSS	303	65 mg/L	45 mg/L
Jan. – June 2005	Fecal Coliform	303	1230 col/100 ml	43 col/ 100 ml
July – Dec. 2005	TSS	303	71 mg/L	45 mg/L
Jan June 2006	TSS	303	88 mg/L	45 mg/L
July - Dec. 2003	TSS	403	60 mg/L	45 mg/L
Jan. – June 2003	TSS	503	86 mg/L	45 mg/L
July – Dec 2003	TSS	503	48 mg/L	45 mg/L
Jan. – June 2004	TSS	503	67 mg/L	45 mg/L

# DMR Review/Excursions - continued

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	Reported Value	Permit Limits
July – Dec. 2004 July – Dec 2005	TSS Fecal Coliform	603 603	111 mg/L 210 col/100 ml	45 mg/L 43 col/ 100 ml
July – Dec 2004 July-Dec. 2005	TSS Fecal Coliform	703 703	99 mg/L TNTC*	45 mg/L 43 col/100 ml
July – Dec 2003 Jan. – June 2004 July – Dec 2004 Jan. – June 2005 July – Dec 2005	Fecal Coliform Fecal Coliform TSS Fecal Coliform Fecal Coliform	803 803 803 803 803	TNTC* 12,000 col/100 ml 298 mg/L 2090 col/100 ml TNTC*	43 col/100 ml 43 col/100 ml 45 mg/L 43 col/100 ml 43 col/100 ml
Jan. – June 2003	BOD TSS Fecal Coliform	004 004 004	151 mg/L 190 mg/L TNTC*	45 mg/L 45 mg/L 43 col/100 ml
JanJune 2005 July – Dec 2005	TSS Fecal Coliform	004 004	47 mg/L 7,800 col/100 ml	45 mg/L 400 col/100 ml
July - Dec 2004	TSS	106	130 mg/L	45 mg/L
Jan. – June 2003 July – Dec 2005 Jan. – June 2006	Fecal Coliform Fecal Coliform BOD TSS Fecal Coliform	008 008 008 008 008	150 col/100 ml 2,800 col/100 ml 65 mg/L 122 mg/L 3000 col/100ml	43 col/100 ml 43 col/100 ml 45 mg/L 45 mg/L 43 col/100 ml
JanMarch 2005	COD	010	128 mg/L	125 mg/L
LAG531377				
JanJune 2004	TSS Fecal Coliform	001 001	130 mg/L 6,700 col/100 ml	45mg/L 43 col/100 ml
July-Dec. 2004	Fecal Coliform	001	590 col/100 ml	43 col/ 100 ml

<sup>\*</sup> Too Numerous To Count

#### 8. EXISTING EFFLUENT LIMITS

Outfalls 001A, 001B, 002, and 003 – utility washwater, oil and/or fuel depot secondary containment wastewater, previously monitored treated sanitary wastewater, non-process area stormwater, and previously treated hydrostatic test water – Main Yard

Pollutants	Monthly Average (mg/l) unless stated	Daily Maximum (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/3 months
COD		125	1/3 months
Oil & Grease		15	1/3 months
Soaps and/ or			Inventory
detergents			Calculation
pH (standard units)	6.0 (min)	9.0 (max.)	1/3 months

Outfalls 004 and 005 - treated sanitary wastewater and previously monitored hydrostatic test water - Main Yard

Pollutants	Monthly Average (mg/l) unless stated	Daily Maximum (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/6 months
BOD <sub>5</sub>		45 mg/l	1/6months
TSS	<b></b>	45 mg/l	1/6 months
Fecal Coliform colonies/100 mls		400	1/6 months
pH (standard units)	6.0 (min)	9.0 (max)	1/6 months

Outfall 006 – low potential contamination stormwater, utility washwater, previously monitored treated sanitary wastewater, and previously monitored hydrostatic test water – Southport Facility

Pollutants	Monthly Average (mg/l) unless stated	Daily Maximum (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/3 months
COD		125	1/3 months
Oil & Grease		15	1/3 months
Soaps and/ or			Inventory
detergents			Calculation
pH (standard units)	6.0 (min)	9.0 (max.)	1/3 months

Internal Treated Sanitary Wastewater Outfalls (101,201,301,401,601,102,202,302,103,203,303,403,503,603,703,and 803) External Treated Sanitary Wastewater Outfall 009

Pollutants	Monthly Average (mg/l) unless stated	Weekly Average (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/6 months
BOD <sub>5</sub>		45 mg/l	1/6months
TSS		45 mg/l	1/6 months
Fecal Coliform colonies/100 mls		43	1/6 months
pH (standard units)*	6.0 (min)	9.0 (max)	1/6 months

<sup>\*</sup> pH only measured at external Outfall 009

# Outfall 106 - treated sanitary wastewater - Southport Facility

Pollutants	Monthly Average (mg/l) unless stated	Weekly Average (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/6 months
BOD <sub>5</sub>		45 mg/l	1/6months
TSS		45 mg/l	1/6 months
Fecal Coliform colonies/100 mls		400	1/6 months
pH (standard units)	6.0 (min)	9.0 (max)	1/6 months

# Outfall 501 - treated sanitary wastewater

Pollutants	Monthly Average (mg/l) unless stated	Weekly Average (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/3 months
BOD <sub>5</sub>	30	45 mg/l	1/3months
TSS	30	45 mg/l	1/3 months
Fecal Coliform colonies/100 mls	14	43	1/3 months

# Outfall 007 – low contamination potential stormwater runoff, utility wastewater, and previously monitored hydrostatic test water - Southport Facility

Pollutants	Monthly Average (mg/l) unless stated	Daily Maximum (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/3 months
COD		125	1/3 months
Oil & Grease		15	1/3 months
Soaps and/ or			Inventory
detergents			Calculation
pH (standard units)	6.0 (min)	9.0 (max.)	1/3 months

# Outfall 008 - treated sanitary wastewater - Southport Facility

Pollutants	Monthly Average (mg/l) unless stated	Weekly Average (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/6 months
BOD <sub>5</sub>	<b></b>	45 mg/l	1/6months
TSS		45 mg/l	1/6 months
Fecal Coliform colonies/100 mls		400	1/6 months
pH (standard units)	6.0 (min)	9.0 (max)	1/6 months

# Outfall 010 – low contamination potential stormwater runoff, utility wastewater, and previously monitored hydrostatic test water – Southport Facility

Pollutants	Monthly Average (mg/l) unless stated	Daily Maximum (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/3 months
COD		125	1/3 months
Oil & Grease		15	1/3 months
Soaps and/ or			Inventory
detergents			Calculation
pH (standard units)	6.0 (min)	9.0 (max.)	1/3 months

Outfalls 001A, 001B, 002,003, 004, 005, 006, 007,010 – intermittent discharge of hydrostatic test water

Pollutants	Monthly Average (mg/l) unless stated	Daily Maximum (mg/l) unless stated	Monitoring Frequency
Flow - MGD	Report	Report	1/event
TOC		50	1/event
Oil & Grease		15	1/event
TSS		90	1/event
Benzene		50 ug/L	1/event
BTEX		250 ug/L	1/event
Lead		50 ug/L	1/event
pH (standard units)	6.0 (min)	9.0 (max.)	1/event

#### 9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 120509 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

# 10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

# 11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

#### 12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

## Rationale for Gulf Island Fabrication, Inc.

 Outfalls 01A, 01B, 002, 003, and 006 – stormwater runoff combined with utility washwater from pressure washing projects and equipment washing, exterior vehicle washwater (Outfalls 01A, 01B,002, and 003), previously monitored hydrostatic test water, and previously monitored treated sanitary wastewater (flow is intermittent)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow	Report: Report	previous permit; LAG480000
COD	:125	previous permit; LAG480000
Oil and Grease	: 15	previous permit; LAG480000
Soaps and/or detergents	Report:	previous permit; LAG480000
pH Min/Max Values (Standard Units)	6.0 : 9.0	previous permit; LAG480000

Treatment: Outfalls 01A, 01B, and 002 - sediment basin; Outfalls 003 and 006 - none

Monitoring Frequency: once per quarter

Limits Justification: All limits are based on the previous permit and the Light Commercial General Permit, LAG480000, issued July 31, 2001, Schedule B.

2. Outfalls 101, 201, 701, 005, 102, 202, 403, 503, 603, 703, and 106 – treated sanitary wastewater discharges less than 5,000 gpd

Pollutant	<u>Limitation</u> Mo. Avg:Weekly Average (mg/l)	<u>Reference</u>
Flow	Report : Report	previous permit; LAG530000
BOD₅	: 45	previous permit; LAG530000
TSS	: 45	previous permit; LAG530000
Fecal Coliform	: 400	LAG530000
(colonies/100 ml)		
pH Min/Max Values (*1) (Standard Units)	6.0 : 9.0	previous permit; LAG530000

Treatment: mechanical treatment plant

Monitoring Frequency: 1/6 months

Limits Justification: Flow, BOD, TSS, and pH limits are based on the previous permit and also on the Class I Sanitary Discharge General Permit, LAG530000. The previous permit listed the discharges to the

Houma Navigation Canal from this facility as located in Subsegment 120508, Houma Navigation Canal – Bayou Pelton to the boundary between segments 1205 and 1207 (Estuarine), of the Terrebonne Basin. Oyster propagation is listed as a designated use of Subsegment 120508. Therefore, fecal coliform limits for treated sanitary wastewater discharges to Subsegment 120508 were set at 43 colonies/100 ml, weekly average. According to the current subsegment map, the discharges from this facility are made to the Houma Navigation Canal in Subsegment 120509, Houma Navigation Canal – Houma to Bayou Pelton. Oyster Propagation is not listed as a designated use of Subsegment 120509. Therefore, fecal coliform limits for the treated sanitary wastewater discharges have been changed from 43 col/100 ml to 400 col/100 ml, weekly average. The increased Fecal Coliform limit is based on the Class I Sanitary Discharge General Permit, LAG530000.

- (\*1) If the outfall is an internal outfall, pH does not have to be monitored at the internal outfall point of discharge. It will be monitored at the external outfall.
- 3. **Outfalls 301, 401, 302, 103, 303, 803, 004, and 008** treated sanitary wastewater discharges less than 5,000 gpd

Pollutant	<u>Limitation</u>	Reference	
	Mo. Avg: Weekly Average (mg/l)		
Flow	Report : Report	previous permit; LAG530000	
BOD₅	: 45	previous permit; LAG530000	
TSS	: 45	previous permit; LAG530000	
Fecal Coliform (colonies/100 ml)	: 400	LAG530000	
pH Min/Max Values (*1) (Standard Units)	6.0 : 9.0	previous permit; LAG530000	

Treatment: mechanical treatment plant

Monitoring Frequency: There are numerous excursions from permit limits for these sanitary outfalls (see DMR Review, Page 12). Therefore, the monitoring frequency has been increased to 1/3 months for these outfalls.

Limits Justification: Limits Justification: Flow, BOD, TSS, and pH limits are based on the previous permit and also on the Class I Sanitary Discharge General Permit, LAG530000. The previous permit listed the discharges to the Houma Navigation Canal from this facility as located in Subsegment 120508, Houma Navigation Canal – Bayou Pelton to the boundary between segments 1205 and 1207 (Estuarine), of the Terrebonne Basin. Oyster propagation is listed as a designated use of Subsegment 120508. Therefore, fecal coliform limits for treated sanitary wastewater discharges to Subsegment 120508 were set at 43 colonies/100 ml, weekly average. According to the current subsegment map, the discharges from this facility are made to the Houma Navigation Canal in Subsegment 120509, Houma Navigation Canal – Houma to Bayou Pelton. Oyster Propagation is not listed as a designated use of Subsegment 120509. Therefore, fecal coliform limits for the treated sanitary wastewater discharges have been changed from 43 col/100 ml to 400 col/100 ml, weekly average. The increased Fecal Coliform limit is based on the Class I Sanitary Discharge General Permit, LAG530000.

- (\*1) If the outfall is an internal outfall, pH does not have to be monitored at the internal outfall point of discharge. It will be monitored at the external outfall.
- 4. Outfall 501- treated sanitary wastewater (average/design flow is 7500 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Weekly Average (mg/l)	Reference
Flow	Report: Report	previous permit; LAG540000
BOD <sub>5</sub>	30: 45	previous permit; LAG540000
TSS	30: 45	previous permit; LAG540000
Fecal Coliform (colonies/100 ml)	200 : 400	LAG540000

Treatment: mechanical treatment plant

Monitoring Frequency: There are numerous excursions from permit limits for Outfall 501 (see DMR Review, Page 12). Therefore, the monitoring frequency has been increased to 1/ month.

Limits Justification: All limits are based on the previous permit and/or on the Class II Sanitary Discharge General Permit, LAG540000. The previous permit listed the discharges to the Houma Navigation Canal from this facility as located in Subsegment 120508, Houma Navigation Canal — Bayou Pelton to the boundary between segments 1205 and 1207 (Estuarine), of the Terrebonne Basin. Oyster propagation is listed as a designated use of Subsegment 120508. Therefore, fecal coliform limits for treated sanitary wastewater discharges to Subsegment 120508 were set at 43 colonies/100 ml, weekly average. According to the current subsegment map, the discharges from this facility are made to the Houma Navigation Canal in Subsegment 120509, Houma Navigation Canal — Houma to Bayou Pelton. Oyster Propagation is not listed as a designated use of Subsegment 120509. Therefore, fecal coliform limits for the treated sanitary wastewater discharges have been changed from 43 col/100 ml to 400 col/100 ml, weekly average. The increased Fecal Coliform limit is based on the Class I Sanitary Discharge General Permit, LAG530000.

5. **Outfall 007** – stormwater runoff, utility washwater from pressure washing projects, and previously monitored hydrostatic test water (flow is intermittent)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	Reference .
Flow	Report : Report	previous permit; LAG480000
COD	:125	previous permit; LAG480000
Oil and Grease	: 15	previous permit; LAG480000
Soaps and/or detergents	Report :	previous permit; LAG480000
pH Min/Max Values (Standard Units)	6.0 : 9.0	previous permit; LAG480000

Treatment: none

Pollutant

Monitoring Frequency: once per quarter

Limits Justification: All limits are based on the previous permit and the Light Commercial General Permit, LAG480000, issued July 31, 2001, Schedule B.

6. Outfalls 602, 903, and 011 - hydrostatic test water (flow is intermittent – estimated average is 1500 gpd per outfall)

Reference

Limitation

	Mo. Avg:Daily Max (mg/l)	
Flow (*1)	Report: Report	previous permit; LAG670000
TOC (*2)	:50	previous permit; LAG670000
Oil and Grease (*1)	:15	previous permit; LAG670000
TSS (*1)	:90	previous permit; LAG670000
Benzene (*2)	:0.05	previous permit; LAG670000
Total BTEX (*2)	:0.25	previous permit; LAG670000
Lead(*2)	:0.05	previous permit; LAG670000
pH Min/Max Values (Standard Units)	6.0:9.0	previous permit; LAG670000

Treatment: none

Monitoring Frequency: Hydrostatic test wastewater from new pipe, vessels, or equipment shall be monitored quarterly. Hydrostatic test wastewater from pipe, vessels, or equipment, which have previously been in service; i. e., those which are not new shall be monitored once per discharge. Monitoring frequency is based on an existing permit for a similar facility, Dolphin Services, Inc., LA0075779 (\*3).

Limits Justification: All limits are based on outfalls in the previous permit that discharge hydrostatic test wastewater and also on LPDES General Permit Number LAG670000, Hydrostatic Test Wastewater.

- (\*1) Flow, TSS, Oil and Grease, and pH are the only testing requirements for new pipe, vessels, or equipment.
- (\*2) Total Organic Carbon (TOC) shall be measured on discharges from pipelines, vessels, and equipment which have previously been in service; i. e., those which are not new. Benzene, Total BTEX, and Lead shall be measured on discharges from pipelines, vessels, and equipment, which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. These parameters are required to be monitored in addition to Flow, Oil and Grease, TSS, and pH.
- (\*3) Gulf Island Fabrication requested that hydrostatic test wastewater from new pipe, vessels, or equipment be monitored quarterly. Hydrostatic test wastewater from pipe, vessels, or equipment which have previously been in service, i. e. those which are not new, would still be monitored once per discharge. Gulf Island requested this change to minimize their costs for testing hydrostatic test waters. This is the monitoring frequency set for hydrostatic testing outfalls in an LPDES permit for a similar facility, LPDES permit number LA0075779, issued to Dolphin Services, Inc., an oilfield equipment fabrication facility which is also owned by Gulf Island Fabrication. According to the request, hydrostatic testing occurs almost daily at the East, West, and Southport Yards. The majority of the testing occurs on new vessels.

There have been no excursions of permit limits for hydrostatic test wastewater. Therefore, this request has been approved. The monitoring frequency for Hydrostatic Test Wastewater has been changed from once per discharge to once per quarter for new equipment and once per discharge for equipment which has previously been in service.

#### NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

#### STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC codes 3731, 3441, and 1389 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Part II of the permit).